

## WESTMINSTER

December 11, 2000

Dyan Foss Rocky Flats Environmental Technology Site 10808 Highway 93, B130 Golden, Colorado 80403-8200

City of Westminster Department of Public Works and Utilities

4800 West 92nd Avenue Westminster, Colorado 80031

303-430-2400 FAX 303-650-1643 Dear Ms Foss:

The City of Westminster has reviewed Modification 3 and the Proposed Action Memorandum for Under Building Contamination Remediation for the 771 Closure Project Decommissioning Operations Plan and offers the following comments:

Section 3.1, Building History and Description, page 13: This section understates the events that have occurred in building 771. The building chronology indicates that there was a glovebox fire in the building in 1957, which resulted in the transfer of a plutonium foundry, fabrication and assembly operations to building 776/777.

<u>Comment:</u> It would seem important to discuss the nature and extent of the fire to include the fact that the fires spread to 8 larger glovebox filters, which were burned through, and the fire then spread to the main filter plenum. False walls and ceilings were installed in some areas to enclose contamination resulting from the fire. Understating the condition of the building may result in underestimating the protective measures that will need to be taken to protect workers during these hazardous activities.

Section 1.2, Decommissioning Under the Rocky Flats Agreement paragraph 2 page 4: The second sentence reads "Type 2 buildings do not have significant contamination or hazards, but need some level of decontamination.

<u>Comment</u>: Please define significant. What percentage of the building has to be contaminated, what are the contaminants of concern before a building has significant contamination.

<u>Table 3, Set Descriptions. Pages 21-22</u>: Many of the sets of gloveboxes to be removed are highly contaminated and according to former workers are at infinity levels. Set 62 discusses removing hydrofluorninator and scrubber.

<u>Comment</u>: HF is a very hazardous acid and any work in areas where it is stored or used should be listed as Level 3 areas. Extra worker protection such as respirators should be required in these areas.

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Table 4. Area Descriptions page 24: Under the AG section it indicates that the tunnel areas interior surfaces will have paint removed to facilitate PDS. The description does not mention the floor areas in these tunnels which also should be characterized for contamination. Water from the 771 fire was known to be at least an inch high in the 76 tunnel. Significant contamination may be found on the floor surfaces and soils.

<u>Pagragraph 3 page 27:</u> This section is confusing please provide a description of where scaffolding will be installed to remove ceiling contamination. Is this throughout the building?

<u>Paragraph 6, page 27:</u> The paragraph states that "floor slabs exhibiting penetration of contaminants greater than one inch will be removed and disposed of as low level or low-level mixed waste." Surface contamination will be "fixed" and the slabs removed using concrete floor saws.

<u>Comment</u>: If the surface contamination is fixed the concrete does not automatically become low level waste. Please provide information as to the worker safety and resuspension hazards associated with fixing contamination and then sawing through the "fixed" concrete.

Section 4.4.4 Room 141, pages 28-29: This section is very confusing. The first paragraph on page 28 states that "Room 141 is sometimes referred to as an infinity room."

Comment: The sentence should be rewritten to state Room 141 is an infinity room and then in parenthesis define infinity room or use a footnote at the bottom of the page to describe the level of radionuclide contamination in this room. Former workers that were in room 141 when the jack hammer went through the concrete indicate that "green feed" also ran through the floor in that room. The historical records and current worker knowledge should be reviewed to validate this information. The concrete on the floor in room 141 is no doubt highly contaminated. The City of Westminster requests that the process for removing and decontaminating the infinity room be accompanied with drawings of the area that indicated the process for removing this room. A logic flow diagram that is easier to follow and understand would also be helpful. The process as defined in this section affords ample opportunity for worker and further building contamination.

Section 4.5.3 Data Summary: The second paragraph page 31 indicates that "underbuilding contamination will be limited to the immediate underlying backfill material and that the flow of groundwater into the building and/or footing drains, instead of away from the building, limits contaminant migration. Comment: The city requests that sampling also be undertaken away from the building in the area of the infinity room to ensure that the groundwater located

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under this room has not seeped towards Walnut Creek. Please provide information as to control of the groundwater while awaiting ER in this area.

<u>Section 4.5.4.5 Completion of Remedial Action</u>: The paragraph indicates that after the environmental remediation actions are completed the equipment will be decontaminated.

<u>Comment</u>: Please provide information on the decontamination of the large tracked equipment used to bring down the building prior to its being returned to the rental company.

Section 4.5.5 Worker Health and Safety: This section states that a "Site Specific Health and Safety Plan will be developed to address the safety and health hazards of each phase of site operations and specify the requirements and procedures for employee protection. In addition DOE Order for Construction Project Safety and Health Management, 5480.9A applies to this project. The order requires the preparation of activity hazard analyses to identify each task, the hazards associated with each task and the cautions necessary to mitigate the hazards."

<u>Comment:</u> Since decommissioning and decontamination work is currently underway in building 771 when will the health and safety plan and hazard analyses be completed. Protection of worker health and safety during the activities in building 771 is important to the City of Westminster.

<u>Section 4.7.1.3 Site Preparation page 39:</u> The last paragraph indicates that there will be temporary stockpile areas for debris, and that materials appear likely to be in temporary storage for a long period and that a more permanent area will be created that will encompass additional erosion or run-on/run off controls as necessary.

<u>Comment:</u> The document needs to document the controls such as berms that will be used to protect surface water. Additionally, a fixative will need to be added to materials that are stockpiled in order to minimize resuspension of residual contaminants as a result of wind and weather dispersion. If there is residual contamination other environmental impacts should be evaluated as well as safety issues.

Section 4.7.1.5 Demolition of Outbuildings page 40: The section indicates that "dependant upon identification or investigation of environmental media concerns, the concrete slab/foundation associated with the building will be broken up using a vibratory hammer attachment to the excavator.

<u>Comment:</u> Environmental media concerns is a vague statement. Language should be inserted that specifically spells out the concerns including the proximity of plumes. Use of a vibratory hammer could open up pathways for

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contaminant movement and could damage utility lines nearby. Project specific monitoring needs to be considered for this project.

Section 4.7.1.8 Demolition of the main building 771 structure page 41 The section states that "the concrete wall will be removed to a point a minimum of 3 feet below the proposed grade. This will be accomplished using the tracked excavator, working along the indicated project of the final cap (minus 3 feet)."

Comment: Use of caps on the foundation of building 771 has not been approved. The foundation of this building should be removed and the hillside behind it stabilized. Leaving the foundation in place poses a physical hazard.

<u>Section 4.7.2 Demolition of the Stack page 43</u>. The first paragraph states that the demolition plan indicates that the stack structure will be demolished using explosives. The demolition of the stack will be developed around the layover method allowing the stack to fall due east toward Pond 207 C into a prepared trench.

<u>Comment</u>: The lead regulatory agency must approve and the local governments that are downwind from the site must be consulted prior to <u>any use</u> of explosives. Has the contractor considered foaming the interior of the stack prior to taking it down to address the problem of the dust that will be generated during the activity?

<u>Table 9, page 54-55</u> The section indicates that the recycled concrete will not be transported and stockpiled as indicated in the RSOP for Recycling Concrete. An exception to the RSOP for Recycling Concrete, which will eliminate the need to stockpile and size reduce the concrete while still meeting the lifetime subsidence requirement.

<u>Comment:</u> The initial RSOP cited the costs of transporting rubble offsite to a nearby landfill as a valid reason for stockpiling onsite. The 771 Mod to the DOP now states that it is too costly to transport the fill to the current stockpile onsite. There is no plan to place the rubble from this building on an impervious surface. A potential exists for the downward migration of non-radiological materials into the underlying soil columns. Surface precipitation may dissolve materials and carry them into the underlying soils and groundwater over time.

Non-toxic surfactants will need to be applied to stockpile to prevent migration of fines and other dissolved materials that may have contaminated concrete surfaces due to past facility operations and to keep wind transport to a minimum.

If the total land surface involved with stockpiling and processing of concrete exceeds 5 acres then a pollution prevention runoff plan must be prepared. Rubble backfill sites may constitute disposal of a non-hazardous solid waste

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and therefore require a permit. Slumping over the lifetime of the backfill area as stated in the Rubble Disposition RSOP is 1%. Would this still be the case of concrete slabs are placed in the ground? It would seem that precipitation percolation pathways would be created due the fact that there would be crevices where the concrete edges do not meet. There are no provisions to characterize the fill sites for geotechnical purposes.

The long-term burial of concrete slabs may impact groundwater. Current seasonal groundwater levels may reach 10 to 20 feet. Percolation of groundwater through the fill may affect the pH of the groundwater due to the alkalinity of the concrete. Impacts to groundwater from disposition of rubble will need to be considered.

Back-filled areas should be mapped along with geostructural data. This information should be part of the long-term stewardship record.

Thank you for the opportunity to provide comments on this draft document. The City looks forward to receiving your reply.

Sincerely,

Mary Harlow

**Rocky Flats Coordinator**